

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
16 December 2004 (16.12.2004)

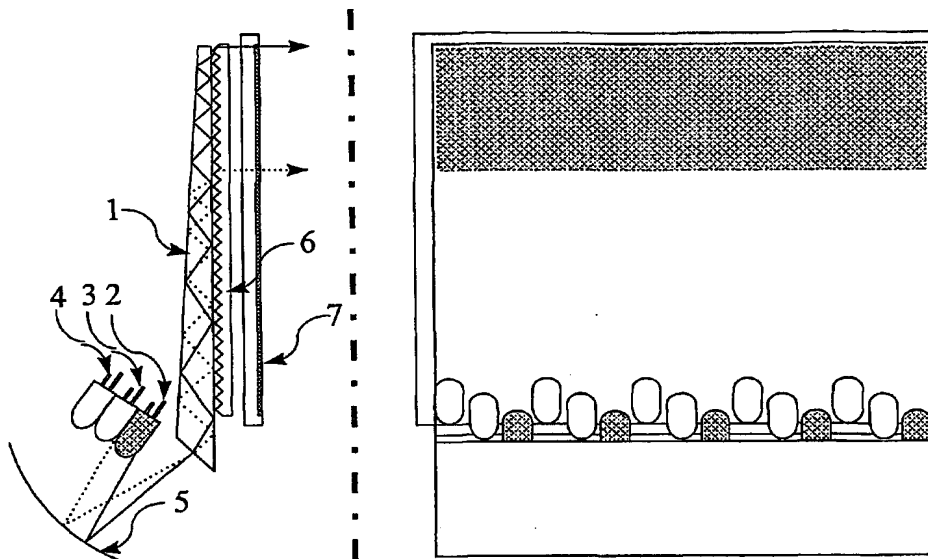
PCT

(10) International Publication Number
WO 2004/109380 A1

- (51) International Patent Classification⁷: **G02F 1/13357**, G09G 3/34
- (21) International Application Number: PCT/GB2004/002386
- (22) International Filing Date: 4 June 2004 (04.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0313044.0 6 June 2003 (06.06.2003) GB
- (71) Applicant (for all designated States except US): **CAMBRIDGE FLAT PROJECTION DISPLAYS LTD** [GB/GB]; Manor House, 46 Chequer Street, Fenstanton Cambridgeshire PE28 9JQ (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **TRAVIS, Adrian, Robert, Leigh** [GB/GB]; Clare College, Cambridge CB3 9AJ (GB).
- (74) Agent: **GIBBS, Christopher, Stephen**; Haseltine Lake, Imperial House, 15-19 Kingsway, London WC2B 6UD (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: SCANNING BACKLIGHT FOR FLAT-PANEL DISPLAY



(57) Abstract: An illuminator for a flat-panel display comprises a tapered slab waveguide (1) co-extensive with the display, a light source (2-4) arranged to inject light into an edge of the waveguide so that it emerges over the face of the waveguide, and means for scanning the light injected into the wedge so that different areas of the panel are illuminated in turn. Preferably the light source is a set of rows of LEDs, each row injecting light at a different range of angles so that it emerges over different areas of the waveguide 1.



Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.